

IN THE CLAIMS

Claims 1-65 (cancel).

Claim 66 (new): An isolated genetic construct which is capable of delaying, repressing or otherwise reducing the expression of a target gene in an animal cell which is transfected with said genetic construct,

wherein said genetic construct comprises at least two copies of a structural gene sequence and at least one terminator sequence,

wherein said structural gene sequence comprises a nucleotide sequence which is substantially identical to at least a region of said target gene,

wherein said at least two copies of said structural gene sequence are placed operably under the control of a single promoter sequence which is operable in said cell, wherein at least one copy of said structural gene sequence is placed operably in the sense orientation under the control of said promoter sequence,

and wherein said at least one said terminator sequence is operably linked to at least one copy of said structural gene sequence.

Claim 67 (new): An isolated genetic construct which is capable of delaying, repressing or otherwise reducing the expression of a target gene in an animal cell which is transfected with said genetic construct,

wherein said genetic construct comprises at least two copies of a structural gene sequence and at least two terminator sequences,

wherein each copy of said structural gene sequence is separately placed under the control of a promoter which is operable in said cell, and

wherein said structural gene sequence comprises a nucleotide sequence which is substantially identical to at least a region of said target gene,

wherein at least one copy of said structural gene sequence is placed operably in the sense orientation under the control of an individual promoter sequence, and

wherein at least one terminator sequence is operably linked to at least one copy of said structural gene sequence.

Claim 68 (new): The isolated genetic construct of claim 66,
wherein at least one other copy of said structural gene sequence is placed operably in the antisense orientation under the control of said promoter sequence.

Claim 69 (new): The isolated genetic construct of claim 67,
wherein at least one other copy of said structural gene sequence is placed operably in the antisense orientation under the control of another individual promoter sequence.

Claim 70 (new): The isolated genetic construct of claim 68,
wherein the at least one copy of the structural gene sequence that is placed in the sense orientation relative to the promoter and the at least one other copy of the structural gene sequence that is placed in the antisense orientation relative to the promoter are spaced from each other by a nucleic acid stuffer fragment.

Claim 71 (new): The isolated genetic construct according to claim 66, wherein said region of the target gene is about 20 to 30 nucleotides long.

Claim 72 (new): The isolated genetic construct according to claim 66, comprising two copies of said structural gene sequence.

Claim 73 (new): The isolated genetic construct according to claim 66, wherein said region of the target gene is at least about 30 nucleotides long.

Claim 74 (new): The isolated genetic construct according to claim 66, wherein said structural gene sequence comprises a nucleotide sequence that is identical to said region of said target gene.

Claim 75 (new): A method of delaying or repressing the expression of a target gene in an animal cell, comprising transfecting said animal cell with the genetic construct of claim 66.

Claim 76 (new): The method according to claim 75, wherein at least one other copy of said structural gene sequence is placed operably in the antisense orientation under the control of said promoter sequence.

Claim 77 (new): The method according to claim 76, wherein said copy of said structural gene sequence that is placed in the sense orientation relative to said promoter and said copy of said structural gene sequence that is placed in the antisense orientation relative to said promoter are spaced from each other by a nucleic acid stuffer fragment.

Claim 78 (new): A method according to claim 75, wherein said region of the target gene is about 20 to 30 nucleotides long.

Claim 79 (new): The method according to claim 75, wherein said genetic construct comprises two copies of said structural gene sequence.

Claim 80 (new): The method according to claim 75, wherein said region of the target gene is at least about 30 nucleotides long.

Claim 81 (new): The method according to claim 75, wherein said structural gene sequence comprises a nucleotide sequence that is at least 80% identical to said region of said target gene.

Claim 82 (new): An animal cell comprising the genetic construct according to claim 66.

Claim 83 (new): An isolated genetic construct which is capable of delaying, repressing or otherwise reducing the expression of a target gene in an animal cell transfected with said genetic construct, wherein said genetic construct comprises:

one or more copies of a structural gene sequence and one or more terminator sequences,

wherein said one or more copies of said structural gene sequence comprise a nucleic acid sequence which is substantially identical to at least a region of said target gene,

wherein said one or more copies of said structural gene sequence are placed between opposing first and second promoter sequences,

wherein said one or more copies of said structural gene sequence are placed operably in the sense orientation under the control of said first promoter sequence, and operably in the antisense orientation under control of said second promoter sequence, and

wherein at least one of said structural gene sequences is operably linked to at least one of said one or more terminator sequences.

Claim 84 (new): The isolated genetic construct of claim 83, wherein transcription of said one or more copies of said structural gene sequences produces two single stranded RNA transcripts which hybridize to form double stranded RNA.

Claim 85 (new): The isolated genetic construct of claim 83, wherein said first and second promoter sequences are selected from the group consisting of a T7 promoter, a t3 promoter, a SP6 promoter, a *lac* operator-promoter, a *tac* promoter, an SV40 late promoter, an SV40 early promoter, an RSV-LTR promoter and an CMV IE promoter.

Claim 86 (new): The isolated genetic construct of claim 83, wherein at least one of said first and second promoter sequences is a T7 promoter.

Claim 87 (new): The isolated genetic construct of claim 83, wherein said first and second promoter sequences are the same.

Claim 88 (new): The isolated genetic construct of claim 87, wherein at least one of said promoter sequences is a T7 promoter.

Claim 89 (new): The isolated genetic construct of claim 83, wherein said promoter sequences are different.

Claim 90 (new): The isolated genetic construct of claim 83, wherein said region of the target gene is about 20 to 30 nucleotides long:

Claim 91 (new): The isolated genetic construct of claim 83, wherein said region of the target gene is at least about 30 nucleotides long.

Claim 92 (new): The isolated genetic construct of claim 83, wherein said structural gene sequence comprises a nucleotide sequence that is identical to said region of said target gene.

Claim 93 (new): A method of delaying or repressing the expression of a target gene in an animal cell, comprising transfecting said animal cell with the genetic construct of claim 83.

Claim 94 (new): The method of claim 93, wherein transcription of said one or more copies of said structural gene sequences produces two single stranded RNA transcripts which hybridize to form double stranded RNA.

Claim 95 (new): The method of claim 93, wherein said promoter sequences are selected from the group consisting of T7 promoter, t3 promoter, SP6 promoter, *lac* operator-promoter, *tac* promoter, SV40 late promoter, SV40 early promoter, RSV-LTR promoter, and CMV IE promoter.

Claim 96 (new): The method of claim 93, wherein at least one of said first and second promoter sequences is a T7 promoter.

Claim 97 (new): The method of claim 93, wherein said first and second promoter sequences are the same.

Claim 98 (new): The method of claim 93, wherein said promoter sequences are different.

Claim 99 (new): The method of claim 93, wherein said region of the target gene is about 20 to 30 nucleotides long.

Claim 100 (new): The method of claim 93, wherein said region of the target gene is at least about 30 nucleotides long.

Claim 101 (new): The method of claim 93, wherein said structural gene sequence comprises a nucleotide sequence that is identical to said region of said target gene.

Claim 102 (new): An animal cell comprising the genetic construct of claim 83.

Claim 103 (new): The animal cell of claim 102, wherein transcription of said one or more copies of said structural gene sequences produces two single stranded RNA transcripts which hybridize to form double stranded RNA.

Claim 104 (new): The animal cell of claim 102, wherein said promoter sequences are selected from the group consisting of a T7 promoter, a t3 promoter, a SP6 promoter, a *lac* operator-promoter, a *tac* promoter, a SV40 late promoter, a SV40 early promoter, a RSV-LTR promoter and a CMV IE promoter.

Claim 105 (new): The animal cell of claim 102, wherein at least one of said first and second promoter sequences is a T7 promoter.

Claim 106 (new): The animal cell of claim 102, wherein said first and second promoter sequences are the same.

Claim 107 (new): The animal cell of claim 102, wherein at least one of said promoter sequences is a T7 promoter.

Claim 108 (new): The animal cell of claim 102, wherein said promoter sequences are different.

Claim 109 (new): The animal cell of claim 102, wherein said region of the target gene is about 20 to 30 nucleotides long.

Claim 110 (new): The animal cell of claim 102, wherein said region of the target gene is at least about 30 nucleotides long.

Claim 111 (new): The animal cell of claim 102, wherein said structural gene sequence comprises a nucleotide sequence that is identical to said region of said target gene.

Claim 112 (new): An isolated genetic construct which is capable of delaying, repressing or otherwise reducing the expression of a target gene in an animal cell transfected with said genetic construct, wherein said genetic construct comprises:

one or more copies of a structural gene sequence and one or more terminator sequences,

wherein said structural gene sequence comprises a nucleic acid sequence which is substantially identical to at least a region of said target gene,

wherein said one or more copies of a structural gene sequence are placed between opposing first and second T7 promoter sequences,

wherein said one or more structural gene sequences are placed operably in the sense orientation under the control of said first T7 promoter sequence, and operably in the antisense orientation under control of said second T7 promoter sequence, and

wherein at least one copy of said structural gene sequence is operably linked to at least one said terminator sequence.

Claim 113 (new): A method of delay or repressing the expression of a target gene in an animal cell comprising transfecting said animal cell with the genetic construct of claim 112.

Claim 114 (new): An animal cell comprising the genetic construct of claim 112.